Siemens Westinghouse SECA
Industrial Team
Program Review

Mike Jaszcar
Stationary Fuel Cells
Siemens Westinghouse Power Corp.
Pittsburgh, Pa.

November 16, 2001

© Siemens Westinghouse Power Corporation 2001 All Rights Reserved
SECA Program Objectives

• Develop an SOFC system prototype with a net power of 3-10 kW
• Ultimate cost goal - $400/kW
SWPC Program Status

• Award notification received
• Statement of work negotiations underway
• DOE contract not in place
SWPC Industrial Team

• Technology Team
  • SWPC
  • Fuel Cell Technologies
  • Blasch Ceramics
  • Georgia Tech

• Customer/Market Teams
  – Stationary
    • Fuel Cell Technologies
    • Lennox Industries
    • Trane
    • Dominion Resources
  – Transportation
    • Fuel Cell Technologies
    • Ford Motor Company
    • Eaton Corporation
  – Military
    • Fuel Cell Technologies
    • Newport News Shipbuilding
    • Eaton
Technical Issues

• Improve cell performance
• On-cell reformation
• Cost-effective fuel processing
• Sulfur tolerant anode
• Low-cost insulation and containment vessel
• High efficiency power conditioning
• Based on SWPC cylindrical cell design
• Maintains Seal-less planar design
• Reduction in resistance and cell cost
• Increase in cell power
• More compact stack
Cell Performance Comparison

![Graph showing cell performance comparison with current density on the x-axis and cell voltage and power on the y-axis.](https://example.com/graph.png)

© Siemens Westinghouse Power Corporation 2001 All Rights Reserved
Bundle Comparison
5 kW SOFC Proof of Concept Model

Fuel Cell Technology
Siemens Westinghouse
Path Forward

- Conclude DOE contract negotiations - EOY ‘01
- Industrial team partners under contract - Jan. ‘02